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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/629,751      | 07/30/2003  | Nobuyoshi Sugahara   | 02910.000071.       | 6787             |

5514 7590 07/18/2005

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| EXAMINER |
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RODEE, CHRISTOPHER D

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| ART UNIT | PAPER NUMBER |
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1756

DATE MAILED: 07/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,751

Applicant(s)

SUGAHARA ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 June 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4-7 and 9-12 is/are rejected.  
7) ☒ Claim(s) 3 and 8 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/9/05.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Information Disclosure Statement*

The references cited on the supplemental IDS filed 9 June 2005 have been considered.

### *Claim Rejections - 35 USC §§ 102 & 103*

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 5-7, 9, 11, and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Higuchi *et al.* in US Patent 6,656,654.

Claims 1, 2, 5-7, and 9-12 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Higuchi *et al.* in US Patent Application Publication 2003/0165760.

Claims 1, 2, 4-7, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi *et al.* in US Patent Application Publication 2002/0081513 in view of Higuchi in US Patent 6,656,654.

These rejections were presented in the last Office action. Applicants traverse the rejections because the specification evidence shows that a premix of the carbon black with the binder resin (i.e., a masterbatch) produces the improved dispersibility of carbon black in the toner binder resin, which is represented by the loss tangent values in the instant claims. Applicants refer to the specification toners in support of their position. Specifically, Toners 6-9 are produced by a one step mix while Toners 1-5 are produced by a masterbatch method.

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Table 4 is relied upon to show that even when the binder resin, carbon black, releasing agent, and charge control agent are the same types of materials, the claimed loss tangent values are not necessarily inherently within the scope of the claims.

The Examiner has carefully reviewed the specification examples. The specification indicates that the claimed loss tangent is related to the dispersion state of carbon black in the toner. Toner 9 has a total of the acid value and hydroxyl value outside the scope of the claimed invention (Toner 9 total acid and hydroxyl value = 78.5 mg KOH/g). As discussed in the last Office action, "the carbon black appears to have enhanced dispersion when the toner has acid values and hydroxyl values as specified (see spec. p. 4, l. 24 – p. 5, l. 18)." Because the comparative toner has a combined acid and hydroxyl value outside the scope of the claims, the artisan would not expect this toner to have the claimed loss tangent. This example is also different from the applied art because the art has a combined acid and hydroxyl value within the scope of the claims.

It is also apparent that Toner 8 does not contain the charge control agent of the prior art and as described in the specification as aiding the claimed loss tangent. As discussed in the last Office action, "the specification also indicates that the dispersibility of the carbon black is enhanced when there is an organometallic compound (spec. p. 5, l. 19 – 26)." Toner 8 would not appear to have the claimed loss tangent because it does not contain a compound disclosed by the specification as aiding carbon black dispersibility, which as noted above affects loss tangent. This example is also different from the applied art because the art has an organometallic compound.

Toners 6 and 7 use a combination of a hybrid resin 1, a paraffin wax, 5 parts of carbon black, and an aluminum salicylate charge control agent. Toner 7 has loss tangent values within the scope of the claims but has an average circularity outside the claims' scope. Toner 6 has a

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circularity within the scope of the claims but a loss tangent outside the scope of the claims. The sole difference between these two examples is the pulverization characteristics. Neither of these examples form a masterbatch as part of the toner preparation. However, one has the requisite loss tangent. It is apparent from Toner 7 that formation of a carbon black masterbatch followed by mixing of the masterbatch with the other toner materials is not required to give the claimed loss tangent. Toner 7 shows that a single step of mixing each of the toner components produces a toner with the requisite loss tangent. This example refutes applicant's position that a masterbatch must be formed to give the loss tangent. The specification does not address the specific pulverization of these examples.

With respect to the inventive examples, none of the Toners 1-5 uses exactly the same composition as the comparative examples. Because there is no side-by-side comparison where the sole difference in toner preparation and composition is the presence of the masterbatch and because Toner 7 shows that a masterbatch is not required to give the requisite loss tangent, applicants' remarks are not persuasive to overcome the rejection.

The Examiner also notes that no evidence reproduces the specific toners of the applied art. Because these references are the basis of the rejection, it is incumbent upon applicant to show that the applied art does not inherently have the characteristics required by the instant claims.

The rejections are still seen as proper and are maintained.

#### ***Allowable Subject Matter***

Claims 3 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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cdr

11 July 2005

  
**CHRISTOPHER RODEE**  
**PRIMARY EXAMINER**